BRUHAT BANGALORE MAHANAGARA PALIKE, BANGALORE

Name of Work: "Development of Park and other Improvement Work in Sy.No.33 of Mallasandra in ward No-13"

Estimate

Estimated Cost Rs.200.00 Lakhs

Assistant Executive Engineer
Project Division, Dasarahalli
BBMP, Bangalore

Executive Engineer
Project Division, Dasarahalli
BBMP, Bangalore

BRUHATH BENGALORE MAHANAGARA PALIKE DASARAHALLI ZONE

Name of Work: Development of Park and other Improvement Work in Sy.No.33 of Mallasandra in ward No-13

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
Civil Work								
KSRRB 300-1. **Earthwork excavation** by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete asper specifications.MORTH / Chapter 3(I No-19.1, P No-133)								
SSM Foundation for grill work								
Children park	1	164.50	0.80	0.60	78.96			
	1	130.00	0.80	0.50	52.00			
Attached children park	1	47.00	1.00	1.00	47.00			
Children park								
For Kerb	2	130.00	0.30	0.20	15.60			
	2	175.00	0.30	0.20	21.00			
Foothpath	1	175.00	2.50	0.20	87.50			
Attached children park								
Earth cutting	1	34.00	25.00	1.50	1275.00			
	1	51.00	25.00	1.00	1275.00			
CC Drain								
Mallasandra(gutte)Park	1	132.40	1.80	1.40	333.65			
	1	31.00	2.00	1.50	93.00			
	1	130.00	1.50	1.30	253.50			
Culvert	1	14.60	1.80	1.40	36.79			
					3569.00	**Cum**	**170.92**	**610013.48**
KSRB 2.8 : Providing and **Filling in foundation with granite / trap broken metal** 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications.(I No-2.15, P No-6)								
CC Drain								
Mallasandra(gutte)Park	1	132.40	1.80	0.20	47.66			
	1	31.00	2.00	0.25	15.50			
	1	130.00	1.50	0.20	39.00			
					102.16	**Cum**	**2240.84**	**228933.18**
KSRB 4-1.2 : Providing and laying in position **plain cement concrete of mix 1:3:6** with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms^thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No. KBS 4.1, 4.2.(P.No-12,I No-4.2)								
SSM Foundation for grill work	1	274.50	0.80	0.15	32.94			
	1	130.00	0.80	0.15	15.60			
Attached children park	1	47.00	1.00	0.15	7.05			
For Kerb	2	130.00	0.30	0.15	11.70			
	2	175.00	0.30	0.15	15.75			
Foothpath	1	175.00	2.50	0.15	65.63			
CC Drain								

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
Mallasandra(gutte)Park	1	132.40	1.80	0.15	35.75			
	1	31.00	2.00	0.15	9.30			
	1	130.00	1.50	0.15	29.25			
Culvert	1	14.60	1.80	0.15	3.94			
CC Road								
In front of children park	1	50.00	10.50	0.15	78.75			
	1	20.00	13.00	0.15	39.00			
	1	130.00	5.00	0.15	97.50			
					442.16	**Cum**	**5348.76**	**2364980.98**

KSRB 4.2.1 : Providing and laying in position reinforced cement concrete of Design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70 cum and fine aggregtes @ 0.47cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reafirmed-2008 at machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6

Children park								
Columns	37	0.23	0.45	3.00	11.49			
plinth Beam	1	274.50	0.60	0.15	24.71			
Attached children park	1	30.00	0.60	0.15	2.70			
					38.89	**Cum**	**6594.26**	**256473.85**

Providing laying palin / **reinforced cement concrete for Box Drain** walls of thicknes 10cm to 20 cm including cenmtering shuttering form work etc. complete as per approved drawiong and design MORTH Specification No. 1500,1700,2200 PCC M 20 Grade upto 0.75 m height using concrete mixture.(I No-37.59.2,P No-265)

CC Drain Raft								
Mallasandra(gutte)Park	1	132.40	1.50	0.15	29.79			
	1	31.00	1.80	0.15	8.37			
	1	130.00	1.20	0.15	23.40			
Culvert	1	14.60	1.50	0.15	3.29			
CC Drain Wall								
Mallasandra(gutte)Park	2	132.40	0.15	0.90	35.75			
	2	31.00	0.23	1.20	17.11			
	2	130.00	0.15	0.80	31.20			
Culvert	2	14.60	0.23	0.90	6.04			
Culverts Top Slab	1	14.60	1.50	0.25	5.48			
					160.42	**Cum**	**11032.48**	**1769878.98**

KSRB 4-6.5 : Providing and removing centering, shuttering, strutting, . propping etc., for columns, pillars, post and struts, square / rectangular/ polygon in plan including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (I.No:4.32, P.No:16, SR 2016-17)

Column								
C1	37	1.36		3.00	150.96			
					150.96	**Sqm**	**387.96**	**58566.44**

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
KSRB 4.9.2 : **Providing T.M.T steel reinforcement** for R.C.C workincluding straightening, cutting, bending, hooking, placing in position,lapping and / or welding wherever required, tying with binding wire andanchoring to the adjoining members wherever necessary complete asper design (laps, hooks and wastage shall not be measured and paid)cost of materials, labour, HOM of machinery complete as perspecifications.Specification No. KBS 4.6.3(I No-4.46.2,P No-17)								
Consider 65kg/Cum for drain	1	185.13	65.00		12033.41			
Consider 7kg/Sqm for Road	1	1385.00	7.00		9695.00			
Consider 100kg/Cum for column	1	38.89	100.00		3889.35			
					25617.76			
					25.62	Tn	64243.42	1645772.58
Providing and Fixing **pre cast covering Slab** made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
CC Drain Raft								
Mallasandra(gutte)Park	1	132.00	1.20		158.40			
	1	31.00	1.60		49.60			
Attached children park	1	130.00	1.00		130.00			
					338.00	Sqm	2100.00	709800.00
KSRRB M2200- Providing Weep Holes KSRRB M2200-8. Providing weep holes in Brick masonry / Plain / Reinforced concrete abutment, wing wall / return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V :20H towards drawing foce. Complete as per drawing and Technical Specifications complete as per specifications MORTH Specification No.2706 & 2200								
Attached children park	2	130.00			47.27			
	2	31.00			15.50			
					62.77	lo's/M	178.08	11178.57
KSRB 5.2-3 : Providing and **constructing granite / trap / basalt size stone masonry** in foundation cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.(I No-5.6,P No-23)								
SSM Foundation for grill work								
Below Ground level								
Children park	1	164.50	0.60	0.45	44.42			
	1	130.00	0.75	0.50	48.75			
Attached children park	1	47.00	0.75	1.00	35.25			
Above ground level								
Children park	1	110.00	0.60	1.00	66.00			
	1	164.50	0.60	0.65	64.16			
	1	130.00	0.60	0.40	31.20			
Attached children park	1	47.00	0.60	0.80	22.56			
Deduction columns	37	0.23	0.45	1.00	3.83			
					308.50	Cum	4438.22	1369193.09

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
KSRB 15.1.3 – do – Providing ruled pointing to coursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications.								
SSM Foundation for grill work	1	164.50		0.65	106.93			
	1	110.00		1.00	110.00			
Attached children park	1	130.00		0.40	52.00			
	1	47.00		0.80	37.60			
					306.53	Cum	103.88	31841.82
KSRB 4-1.6 ; Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, 0.53cum, machine mixed, concrete laid in layers not exceeding 15cms. thick, well compacted, in foundation, plinth and cills, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications.(P.No-12,I No-4.6)								
coping								
Children park	1	130.00	0.60	0.10	7.80			
Attached children park	1	17.00	0.60	0.10	1.02			
					8.82	Cum	5767.46	50,869.00
Fabricating, providing and erecting in position of MS Hot Dip Galvanised Sq. Hallow Poles of 132 X 132 Heavy gauge of length 3000mm with MS. Hot dip Galvanised grill work as per approved design and drawing of chief architect. Using 12 X 75mm galvanised flat for alround frame and 20 X 20mm galvanised forged design with square for vertical at 150mm c/c as shown in the drawing including providing forged ornamental arrowhead at top and bottom. The work is inclusive of throughing flat, square rods, placing welding all the joints, including grinding, finishing 2 coats of anticorrosive paint over one coat of metal primer. The rate is inclusive of all materials like MS. Hollow galvanized pipe, flats, forged square rods, cost of labour for all items of work cost painting, welding, cutting, grinding with all lead and lift as per specification including loading and unloading with cost and conveyance of all materials, labour, machinery andincidental charges for the successful completion of the work as per the direction of the Engineer-in-charge of the work. (Data Rate)								
SSM Foundation for grill work								
coping	1	274.50		1.50	411.75			
Attached children park	1	30.00		1.50	45.00			
					456.75	Sqm	9144.14	4176585.95
Providing and fixing Pre cast solid concrete kerb stones made out of CC1:2:4 and finished with CM 1:3 plastering and finishing cutting etc - do - of size 450 x 200 x 400 mm Page No.25/ Item No. 5.29 and 5.29.1/ PWD SR 2016-17								
NEW KERB	2	130.00			577.78			
	2	175.00			777.78			
				Total Qty	1355.56	No's	385.84	523027.56
KSRB 15-19.1 : Providing and applying ready mix priming coat over concrete / masonry / asbestos cement sheet / plastered surfaces including preparing the surface after throughly cleaning of oil, grease, dirt and other foreign matter, and sand papering including cost of materials, labour, complete as per specifications. (Page No.121, Item No.15.80)								
For Kerb Painting	2	130.00		0.40	104.00			
	2	175.00		0.40	140.00			
					244.00	Sqm	27.56	6724.64

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications.								
For Kerb Painting	2	130.00		0.40	104.00			
	2	175.00		0.40	140.00			
					244.00	Sqm	95.40	23277.60
KSRB 14.6-1: Providing and laying heavy duty cobble stones 60mm thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM of machineries complete as per specifications. Specification No. KBS. (P.No. 101, I.No. 14.6 of CSR 2016-17) Page no- 101., It-14.6 of KPWD S.R 2016-17								
For Foot Path	1	175.00	2.50		437.50			
					437.50	Sqm	966.72	422940.00
Removal of Unserviceable Soil with Disposal KSRRB M300-19. Removal of unserviceable soil including excavation, loading and disposal but excluding replacement by suitable soil which shall be paid separately as per clause 300.5 complete as per specifications. MORTH Specification No. 301								
Children park-Formation								
	1	46.00	30.00	0.75	1035.00			
					1035.00	Cum	71.22	73712.70
Excavation in Soil using **Hydraulic Excavator** CK 90 and Tippers with Disposal KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location and complete as per specifications.(P.No. 143, I.No. 19.14)								
CC Road								
In front of children park	1	50.00	10.50	0.60	315.00			
	1	20.00	13.00	0.60	156.00			
	1	130.00	5.00	0.60	390.00			
Children park-Formation	1	37.00	85.00	0.60	1887.00			
	1	46.00	30.00	1.00	1380.00			
					4128.00	Cum	80.76	333377.28
KSRRB 300-Compaction KSRRB 300-58. **Compaction of original ground** with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications.(P.No. 149, I.No. 19.64)								
CC Road								
In front of children park	1	50.00	10.50		525.00			
	1	20.00	13.00		260.00			
	1	130.00	5.00		650.00			
					1435.00	Sqm	5.30	7605.50

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
KSRRB M300- Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) MORTH Specification No. 305 (I No-19.60,P.No-147)								
CC Road								
In front of children park	1	50.00	10.50	0.30	157.50			
	1	20.00	13.00	0.30	78.00			
	1	130.00	5.00	0.30	195.00			
Children park-Formation	1	37.00	85.00	0.60	1887.00			
	1	46.00	30.00	0.85	1173.00			
					3490.50	**Cum**	**320.12**	**1117378.86**
KSRRB M400- Wet Mix Macadam KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (I No-20.18,P.No-158)								
CC Road								
In front of children park	1	50.00	10.50	0.15	78.75			
	1	20.00	13.00	0.15	39.00			
	1	130.00	5.00	0.15	97.50			
					215.25	**Cum**	**1768.08**	**380579.22**
KSRRB M600-2. **Cement Concrete Pavement** :- Construction of un- reinforced, dowel jointed, plain cement concrete pavement over a prepared sub base with 25mm and down size graded granite metal coarse aggregate with superplastisizer at 3lts conforming to IS 9103- 1999 reaffirmed 2008, (Coarse and fine aggregate conforming to IS:383) mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. MORTH Specification No. 602. - with M30 @ 360 Kg/cum Cement, C.A, 0.69 cum F.A. 0.46 cum (P.No-175,I No-22.2.1)								
CC Road								
In front of children park	1	50.00	10.50	0.15	78.75			
	1	20.00	13.00	0.15	39.00			
	1	130.00	5.00	0.15	97.50			
					215.25	**Cum**	**7110.48**	**1530530.82**
Vaccum de-watering with **vaccum pump** and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift. (P.No-177,I No-22.7)								
CC Road								
In front of children park	1	50.00	10.50		525.00			
	1	20.00	10.50		210.00			
	1	130.00	5.00		650.00			
					1385.00	**Sqm**	**95.40**	**132129.00**

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
							Total Construction Cost	17841513.84
							KRIDL Charges 11%	1962566.52
							Towards PMC Cost	195000.00
							Sub Total	19999080.36
							Utility Shifting,Miscellaneous and Rounding off	919.64
							GRAND TOTAL	20000000.00

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2016-2017.and Data Rates

Assistant Engineer
Project division,Dasrahalli
BBMP Bangalore

Asst. Executive Engineer,
Project division,Dasrahalli
BBMP Bangalore

Executive Engineer,
Project division,Dasrahalli
BBMP Bangalore

ನಂ: BBMP/GE/PD/AS/S2/17-18, D:-20/03/18
ರೂ:... two hundred Lakh ...
... only ...
ಗಳ ಅಂದಾಜು ಪಟ್ಟಿಗೆ ಆಡಳಿತಾತ್ಮಕ ಮಂಜೂರಾತಿ ನೀಡಿದೆ.

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಪೂರ್ವ ವಲಯ
ದಾಸರಹಳ್ಳಿ ವಲಯ, ಬಿಬಿಎಂಪಿ

ನಂ. CE/TS/SO1/17-18 ದಿನಾಂಕ : 24/3/18
ರೂ. Rs. ಎರಡು ಕೋಟಿ ಮಾತ್ರ/-
ಗಳ ಅಂದಾಜು ಪಟ್ಟಿಗೆ ತಾಂತ್ರಿಕ ಮಂಜೂರಾತಿ ನೀಡಿದೆ

ಮುಖ್ಯ ಅಭಿಯಂತರರು
ಬೃ.ಬ.ಮ.ಪಾ.
ದಾಸರಹಳ್ಳಿ ವಲಯ, ಬೆಂಗಳೂರು

ಕಾರ್ಯದರ್ಶಿ ನಿಕಾಯಕರು